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ABSTRACT

This program was developed and implemented to help students in the secondary school vocational area raise their reading test scores and reading comprehension through the use of the Individualized Manpower Training Systems (IMTS) lab. The program's aims were to increase the reading comprehension percentage scores on major tests and to assist the students in the successful completion of vocational education classes. The program consisted of the following activities: pretesting students in reading comprehension from a selection of the Stanford Achievement Test, placing low-level language arts students in the IMTS program instead of a regular tenth grade English class, monitoring progress throughout the semester, making mid-course corrections as necessary, testing on regular vocational course material under normal classroom conditions, posttesting to measure gains in grade levels in language arts, and comparing subject test scores with those of non-IMTS participating students. Thirty-five of the 37 students in the test group showed marked improvement and average gains of (1) reading: +1.35 years; (2) language arts: +11 months; and (3) mathematics: +1.4 years. Results indicated overall success, with 35 students raising their reading comprehension skills 10% and 34 students passing their vocational education classes. (Six tables of data are included in the appendixes and 17 references are attached.) (MG)

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READING REMEDIATION; THE INDIVIDUALIZED MANPOWER TRAINING SYSTEM (IMTS) AS A VIABLE ALTERNATIVE

by

MARSHALL GROSS

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A Practicum Report
Submitted to the Faculty of the Center for the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

June/1984

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Practicum Summary

Reading Remediation, the Individualized Manpower Training System (IMTS) as a Viable Alternative. Gross, Marshall, 1984. Practicum Report, Nova University, Center for the Advancement of Education Descriptors: Remediation, Reading; Remedial, Reading; High Risk Students; Educationally Disadvantaged; Achievement Gains; Technical Education, Reading Difficulties.

The Author developed and implemented a program to help students in the secondary school vocational area raise their reading test scores and reading comprehension through the use of the Individualized Manpower Training System (IMTS) lab. The program's aims were to increase the reading comprehension percentage scores on major tests, and to assist the students in the successful completion of vocational education classes.

The program consisted of these activities: Pretesting students in reading comprehension from a selection of the Stanford Achievement Test, placing low level language arts students in the IMTS program instead of regular tenth grade English class, monitoring progess

throughout the semester, making mid-course corrections as necessary, and testing on regular vocational course material under normal classroom conditions, post-testing to measure gains in grade levels in language arts, and comparing subject test scores with those of non-IMTS participating students.

Results were students showed the following average gains: Reading, +1.35 years;
Language, +11 months;
Math, +1.4 years.

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I Purpose

The community of this Practicum is a fast growing one. The most obvious evidence of this growth is in the population of the community, where an increase of over one-hundred percent has occurred since 1970. The community of 1984 is a predominantly suburban area of 48,000 people, a great change from the 1970 small town of 19,000.

Although much of the working population is still employed outside of the county, there is a much smaller dependency on the adjacent county as an employment base. The introduction of new business ventures, as opposed to industries, a community hospital, a greyhound racing track, and a giant shopping mall have stimulated the local economy and has created new job opportunities for the local residents.

Economic and population growth in the area has stimulated an improvement in transportation to and through the community. Municipal and county services have kept pace with growth while holding local taxes to a minimum. The low residential tax rate, along with a reputation for high quality service, has long been an attraction of this community.

As with the community, the high school has also been in a state of rapid growth and change in the past

ten years. With the completion of the vocational facility on campus, and the recent acquisition of the area previously used as a middle school, this high school has become a true comprehensive high school and the second largest in the state.

The Practicum site is a very conservative community. The parental support of the high school is quite strong, but selective. They have been both forceful and vocal enough, in their support of higher education, to have weighted grades and advanced placement subjects added to the present curriculum; over the recommendations of the school faculty and administrators.

The high school has an enrollment of 2,778. There are 84 black students that attend the school and 2,692 white students. The faculty consists of 154, including teachers, deans, librarians, principal, vice-principal, administrative assistant, assistant principal of the vocational school, assistant principal of curriculum, and guidance counselors. There are 18 custodians, 20 cafeteria workers, 18 secretaries, and 12 office aides. There are 134 students on free or reduced luncheon rates.

The faculty of the high school believes that a

philosophy of the school might be defined in the same fashion as John Dewey defined democracy, i.e., "..... a small core of common agreements surrounded by an infinite variety of individual differences." The faculty largely believes that the comprehensive high school best serves the needs of the students and community.

The high school community is not anti-back-to-basics, but rather pro-student. The high school believes in educating the total student, helping each student experience success to his or her own potential. The high school believes in helping the student establish a sense of self-worth which will thus develop intrinsic motivation towards self-direction in order to keep up with a growing/changing community.

Since the philosophy differs between school and community, a change needs to take place. The school and the community need to align in a common goal: to provide equal opportunities of education for each student while meeting his or her needs at his or her own level. Remedial, supplemental, or new innovations are a must to accomplish this goal.

The Practicum dealt with skills leveled students who were participating in regular vocational education

classes and who, due to low reading scores, have been assigned to the Individualized Manpower Training System (IMTS) lab for language arts and/or mathematics. These students are in the tenth grade, with an average age of fifteen (15). There are 37 students in the class, four (4) of whom are black, two (2) hispanic, and 31 white students. Skills level is below average level at this school. The students have been placed in skills level by a previous teacher due to the students' performance in reading.

The problem of this particular area is low reading scores on all evaluations because of the inability of some students to achieve success or satisfactory results due to low reading comprehension. These students have scored below average on the Stanford Test for the past three (3) years. By having low scores, they are, therefore, placed in a below average language arts class. Out of 37 students, three (3) scored exactly on the percentage cut-off level for the skills class, thirty-four scored below the percentage considered for skills level in reading, and none scored low enough to be placed in the Exceptional Child Education (ECE) program. Reading comprehension is extremely low, with a percentage average of 20 percent, vocabulary skills

were an average of nineteen percent, and spelling at thirty percent. To be placed in an average language arts class, these students need to raise their comprehension skills at least ten percent.

Guidance counselors at the Practicum site have a tendency to encourage low level academic students to enter the vocational education disciplines as opposed to a college preparatory track. This is done without regard to self-pace curriculums or the need for reading comprehension and new vocabularies in these technical oriented areas. Future student employment in some of these technical areas is based on 85% to 100% comprehension rates.

Students who attain low test scores on the Stanford Achievement Tests, Vocational Comprehensive Exams, and subject area exams, and are minimal achievers in their chosen vocation have also been discipline problems in both the vocational education classes and the other subject areas of the high school. Follow-up surveys conducted on a county and state wide basis have shown that these same low skill leveled students have also been unable to gain employment in their vocationally trained areas. It has been shown that students who receive individual or small group tutorial services

in the areas of reading, reading comprehension, and technical vocabulary have achieved a greater success rate than the students who have only been grade or skills leveled.

In the past, at the Practicum site, students have been assigned to vocational classes based on their low level reading and reading comprehension scores. Little or no effort had been made to have these students identified for placement in the Individualized Manpower Training System (IMTS) laboratory until a problem had been identified by a classroom teacher. Input to the IMTS lab then came after much time was lost and often after the student had failed to advance with his or her peers in the mainstream of education; and then, only by the problem being recognized by an instructor in the vocational area.

If remediation does not take place and gains are not made in their general reading skills, then these students will continually be placed in a below average language arts class for the remainder of their high school education. This will or may result in their not attaining the proficiency necessary to pass the Statewide Assessment Exam, the State Vocational Comprehensive Exam, or to gain employment in their

vocational discipline.

With the assistance of the schools' guidance department, forty (40) skills leveled vocational education oriented students were identified, directed placement in and assignment to the IMTS lab for tenth grade language arts and mathematics. Parental contact was made and permission attained for thirty-seven (37) of these students to participate in the IMTS program and in this Practicum project.

The major goal of the Practicum was to raise students' reading comprehension scores through the use of the Individualized Manpower Training System (IMTS). The students involved in this study were to be pretested at the beginning of the study, during and after the Practicum study. The objectives were as follows:

The students will be able to:

1. Read, interpret, and translate selected reading materials with 75 percent accuracy.
2. Read selectively, for technical directions with 85 percent accuracy.
3. Do individualized independent reading and retain 70 percent of material read.
4. Read with reasonable speed of 70 percent

comprehension.

5. Adjust reading speed, method, and technique to purpose and material with 70 percent comprehension
6. Educe the meaning of words through structural analysis and context clues with 70 percent accuracy.
7. Use a dictionary of technical terms to locate necessary data with 90 percent accuracy.
8. Read blueprints and interpret technical instructions with 90 percent comprehension and accuracy.
9. In a technical library, locate, read, and use acquired technical information with 80 percent comprehension and accuracy.

These objectives are measurable through several tests: The Florida Functional Literacy Test, sections from the Stanford Achievement Test, and the Gates MacGinitie Test, which tests speed and accuracy, vocabulary and comprehension.

II Research

The writer found studies done by Lawrence E. Hafner (Improving Reading in Secondary Schools, New York, MacMillan Co.) and Anderson, Dechant, Gullion, Taylor, (Listen and Read, New York, Educational and Developmental Laboratories) have proved that the students in lower classes, due to their reading level, have scored poorly on tests because:

1. They do not read well
2. They do not enjoy the reading material
3. Therefore, they do not like to read

The study found the material used with low level students proved to be boring to them.

The results of using supplementary reading materials and reading machines, with low level students have been tested by using the Stanford Achievement Test, Intermediate Battery, the California Achievement Test, the Standardized Oral Reading Paragraphs, and the Gates-McKillop Reading Diagnostic Tests. Students have improved on their reading tests by three to four grade levels as measured by the Stanford Achievement Tests.

Joan Nelson and Harold L. Herber, in their study, A Positive Approach to Assessment and Correction of Reading Difficulties in Secondary Schools, (Department

of Education, Washington, D.C., 1981), stated that corrective reading assessment and instruction in secondary schools are based on students' weakness rather than on their strengths and bear little relationship to the tasks of content area reading. Two premises serve as a rationale for a positive approach to reading instruction: (1) the majority of students who 'seem' to need corrective reading instruction do not need it, and (2) the majority of students who do need corrective reading instruction do not need the kind they are getting. The key to easing the transition to secondary texts is advanced instruction in reading-reasoning processes in content classrooms, and, for those who still need it, corrective instruction that builds on their strengths; experience, language facility, decoding skills, curiosity, and the capacity to reason.

In a research report by Judith Cochran (Interpersonal Needs of Remedial Readers, 1979), a study sought to determine the effects of reading deficiency on the interpersonal relationship needs of regular and remedial readers as composite groups and on secondary school remedial and regular readers as age groups. Secondary school students were randomly

selected and tested on the Gates-MacGinitie Reading Tests and on the Fundamental Interpersonal Relations Orientation-Behavior Scales. Remedial readers were identifed on the basis of the Gates-MacGinitie scores. The interpersonal tests concentrated on individual behavior that the individual displayed toward others and the behavior that the individual wanted others to display. Results indicated that (1) remedial readers wanted others to take more interest in them than did regular readers, (2) remedial readers differed from regular readers in their need to establish a satisfactory relationship with other people in the area of power and control, (3) remedial readers showed a deficit in meeting 'wanted control' needs, and (4) the remedial readers wanted more affection indicating a strong desire to love other people and have them respond. The significance of the four variables that discriminates between the four groups indicated that age was not a determining factor in interpersonal needs when reading deficits are considered.

Hollie B. Thomas, in her study, A Study to Determine the Impact of Basic Skills and Functional Literacy Requirements on Meeting the Vocational Needs of Secondary Students, (Florida State Department of Edu-

cation, Tallahassee, Division of Vocational Education, 1981), did assess the impact of the Florida State Student Assessment Test (FSSAT) on the enrollment in secondary-level vocational education courses. The 67 school districts in Florida were grouped according to population density and students, county vocational education directors, vocational education teachers, and principals were surveyed. It was found that very few students were deterred from enrolling in vocational courses because of the requirement to be remediated in order to pass the FSSAT. However, a substantial proportion of vocational students who failed the FSSAT did not re-enroll in vocational education courses. The overall effectiveness of the remedial practices was found to be low. It was recommended that (1) systematic, standardized remedial efforts be made; (2) procedures for measuring effectiveness of remedial practices be established; and (3) the reasons that students who failed the FSSAT did not re-enroll in vocational courses be studied.

In a report by Mary W. Olson and Aileen O. Campbell (A Clinical/Support Reading Program for Secondary Schools, 1981), it was stated that faced with a growing number of secondary school students reading

below grade level, educators have begun to look for an effective program to improve reading ability and also meet the special needs of the older students. The clinical/support program recognizes that each student's developmental rate, reading capabilities, and interactions with his or her environment are unique. The program first identifies students special reading needs, then develops student profiles in order to determine individual instructional plans. The program requires the services of a certified reading specialist who spends time providing direct instruction and an equal amount of time testing, planning, demonstration teaching, and record keeping. The specialist is assisted by a paraprofessional who is responsible for supervising students engaged in practice activities and remedial reading.

The Individualized Manpower Training System (IMTS) lab at the Practicum site is capable of meeting all of the aforementioned parameters; staff, clients, equipment, material and resources.

The Department of Education sponsored a study, (Reading Related Teaching Competencies Identified for Florida Vocational Teachers, Florida State University, Tallahassee, Florida, 1979) the purpose of which was

to identify the reading-related teaching competencies that will be of potential use to vocational teachers if they are to develop the reading skills necessary for classroom instruction and job success. Results revealed six (6) tasks which were generic to all programs. Tasks included the following:

(1) Determine students' strengths and weaknesses;

(2) Select teaching techniques that meet the instructional needs of the individual stu-students;

(3) Assign students to master specialized technical vocabulary related to course of instruction;

(4) Encourage students to interpret information, draw conclusions, and predict outcomes when reading;

(5) Encourage students to use the correct definitions of words;

(6) Assign students to read a sequence of events, methods or steps, or to follow written directions.

The handbook on teaching reading in vocational education, (Teaching Reading in Vocational Education, South Carolina State Department of Education, Columbia,

South Carolina, 1983), is designed to provide vocational education teachers with a resource to use in helping students to develop sound reading skills. Provided in the handbook are information sheets, self-checks, practice activities, and suggestions for further reading dealing with the following topics: stratigies for matching reading materials to student abilities (cloze procedure, fitting readability grades of text to student reading level, group informal textbook tests, and adjustments that enable students to cope with content reading); strategies for developing vocabulary and comprehension, and for improving reading during content instruction along with study guides, and the SQ3R study formula.

It was reported in a research report by Dade County Public Schools, Miami, Florida in 1977 (Product Evaluation of the Senior High School Reading Laboratory Programs), that reading labs were established as an approach to remediation, development, or acceleration of reading skills. Pre- and posttest reading achievement scores were compared with grade level, school location, and instructional approaches. The laboratories have shown sufficient promise of affecting reading abilities --particularly comprehension-- that their

continued usage is recommended. The comparison of pre- and posttest scores of laboratory participants in the reading skill areas of comprehension, vocabulary, syllabication and blending were indicative of program impact. Statistically significant gains were realized in grades nine and ten.

The writer found several other studies describing skills laboratories and/or structured tutoring programs; (Reading Skills Laboratories - Optional Assignment, David E. Brandt, 1975, New York City Board of Education, Brooklyn, New York), and (A Highly Structured Tutoring Program for Secondary Students Seriously Deficient in Reading Skills, Michael F. Graves, 1977). These documents describe and evaluate various tutoring and laboratory programs that had been developed for the purpose of improving and teaching reading skills of secondary school students. One of the major strengths of the program was the teaching staff and their ability to establish an excellent working relationship with their students.

Teaching guides written by L. Jay Thornton (Clustered Trade & Industrial Occupations Reading Strategies, Salem, Oregon, Oregon State Department of Education) and Wanda Martin (A Methodology for Reading

Skill Improvement in Vocational Secondary Programs, Pennsylvania, Division of Occupational and Vocational Studies) were developed to help vocational teachers aid students in reading vocational education class materials, this handbook contains six (6) sections of background information and suggested activities geared to various aspects of reading and a section on ideas for use in improving the reading skills of vocational students. The basic reading skills required in vocational programs are listed. Discussed next are using standardized test scores, constructing informal reading inventories (IRIs), choosing reading passages and developing questions, and giving and scoring an IRI. Guidelines are given for assessing the reading level of textbooks. Described next are various methods for teaching vocabulary, including using vocabulary scans, structured overviews, glossaries, illustrations, and abbreviations. A guided reading plan overview, instructions for implementing such a plan, and a study guide are presented. Included in a section on study skills are discussions of taking notes; interpreting charts, graphs, and schematics; and using cross references and conversion tables. A holistic approach to learning and

whole brain activities are explained.

In a research report by Dale L. Morrell (The Development of Vocational Modules and an Evaluative Instrument at Readability Levels Which Are Comprehensible by All Students in the High School Vocational Program, 1977), a project sought (1) to provide vocational units of study geared to the readability levels of all students in high school vocational education and (2) to develop an instrument to measure achievement in vocational education with this same element of readability in mind. Pre- and posttests measuring vocational achievement and reading levels were administered to students. Nine (9) vocational modules were developed and students with low levels were instructed using the modules, while other students were instructed as a control group without benefit of the modules. Scores by the experimental group were significantly higher than those of the control group with the experimental group gaining 6.25 points on the vocational test as compared with 2.53 points by the control group, and gaining .85 years in reading as compared to .42 in the control group. The Virginia Affective Assessment (VAAQ) was also administered, results showing the attitudes and self-con-

cepts of the experimental students to be greatly improved from pre- to post testing.

Conclusions were that all students in the high school vocational curriculum should be able to read and comprehend the vocational modules.

Nancy K. Hartley; and others, in their study, Design and Implementation of an Assessment Model for Students Entering Vocational Education Programs, (University of Northern Colorado, Greely, Colorado, 1979), described a project that was conducted to develop materials that could be utilized by teachers for informal assessment of the needs of students in vocational programs. Sixteen (16) modules were developed to help teachers identify some of the areas in which students have special learning needs, clarify various levels of abilities, and distinguish the different learning styles of students. The sixteen modules covered general and specific areas of vocational education. The materials in the modules allow for informal assessment in three areas: academic skills, motor skills, and vocational and awareness.

The particular strategy was chosen due to the marginal success rate in Trades and Industrial clas-

ses year after year by these low leveled reading students. The writer felt if skills-leveled students were motivated to read, using the Individualized Manpower Training System (IMTS) lab, they should show higher comprehension scores on classroom, county, and state level tests. By proving they can score higher, these students will realize they are able to achieve in their chosen vocational courses as well as being able to remove themselves from the low level classes that was due to their reading performances.

The considerations involved in the decision for the Practicum were many: raising the success rate of students assigned to vocational education classes; assisting teachers in the department with the problem of low level reading comprehension by their students; full utilization of the existing Individualized Manpower Training System laboratory facilities and staff; raising the awareness of self-worth and success in the subject students; and that of raising the reading comprehension scores of these skills-leveled students.

The IMTS lab facilities and staff are an integral part of the Vocational Department and is funded by county budget and federal grants.

Low level reading students were identified by the

language arts department English teachers in the ninth grade, and from that point in time were labeled as skill leveled in the reading area. Those students identified as being deficient in reading comprehension skills, and who were taking or had chosen to follow a vocational course of study, were assigned tenth grade language arts in the IMTS lab. In addition to the assigned period of time in the IMTS lab, these students also had the use of the lab facilities during vocational class time as additional reading, reading comprehension, or specific vocabulary remediation became necessary.

The Individualized Manpower Training System lab also afforded the vocational students an excellent opportunity to quickly elevate their language and reading skills to grade level - or beyond. Realizing that today's technical trades demand employees who are both skillfully trained in their respective fields and adequately equipped with the basic academic skills; IMTS was created to assist those students who, for any reason find themselves with deficient scores in the areas of language, math and reading.

The primary and initial task was to change the learning process to a successful experience for those

who may have found education to be less than successful in the past. Student progress was graded on an "on the job" basis, and employability skills were reinforced along with the scholastic areas.

As an instructor in the trades and industrial program, the writer felt that it was an appropriate strategy to raise the reading comprehension rate of vocational education students, as the application of this skill is most evident in the daily on-the-job performance of these students. The students had been placed in the vocational track and in a skills-leveled class, due to their performance on tests of reading comprehension. The Practicum should help raise the reading comprehension skills of these students, and therefore they should be more successful in their chosen vocations as well as succeed in regular or higher level language arts classes. This in turn, could carry over to other teachers in the department and other areas at the high school.

III Method

The actions that were necessary for carrying out this approach included screening the reading comprehension scores on the Stanford Achievement Test of the students who chose or were guided toward a vocational education; scheduling these students into IMTS for language arts instead of a low skills level English class; and notifying the parents and vocational instructors of these students of said action. The following major activities were undertaken by the write, the IMTS staff and the guidance councilors to implement the Practicum:

1. Students were tested in the ninth grade for reading comprehension as part of the standard SAT battery.
2. Students who chose a vocational track, and whose reading comprehension scores were low were assigned to the IMTS laboratory for language arts.
3. Perental contact was made and permission obtained for these students to participate in the IMTS program and in this Practicum.
4. The IMTS staff pre-tested these students and established a grade level for reading comprehension for each student.

5. The IMTS specialist wrote an individualized prescription and course of action for each student.
6. The IMTS staff and the writer monitored the on going learning activities of these students and modified tasks or activities as necessary.
7. The vocational classroom instructors monitored the test scores and achievement rate of these students in their area specific, and compared these test scores with those of other students assigned to the same trade or vocation.
8. The classroom instructor gave timely feedback to the writer as to the progress of these students, so that mid-course corrections could be made, and so the specific remediation could take place.
9. The IMTS specialist administered the post-test and established what grade level gains had been achieved.
10. The writer graphed the pre- and post- test scores of the students and calculated the individual gain or loss in reading, language arts and mathematics scores.

11. The writer monitored and compared the scores achieved by these students to those of non-IMTS participating vocational students.

The students read selectively and skimmed chosen material with 70 percent accuracy based upon the administered reading tests. They also did extremely individualized reading and interpreted the material with at least 70 percent accuracy based upon writing assignments given by the IMTS specialist. The students were also able to read within a given time frame and retain with a 70 percent or better comprehension level. The students were able to educe the meaning of words they were unfamiliar with through means of structural analysis and contextual clues with sixty percent accuracy.

The writer's specific role and responsibilities in the execution of this Practicum was that of coordinator, over-viwer of activities and scheduling, monitor of testing and providing leadership for the thirty-seven students and staff.

Throughout the duration of the Practicum, the students had constant contact with the writer, the IMTS staff, the regular vocational instructor and other classroom teachers. The facilities and teaching devices used in the IMTS lab were: controlled reading

machine, the programmed sound filmstrip machine, and the cassette tape recorder.

The controlled reading machine was used for:

1. Vocabulary - to "flash" words, recognize and correctly spell words, and for word checks. The machine encourages quick recognition, correct spelling and gives immediate feedback to the student.
2. Reading comprehension - the machine controls the "amount" and the "speed" of the reader. The amount being how much of the line of reading material is shown and the speed being how quickly the light moves across the line of words. Based on the comprehension scores both are increased. Comprehension is evaluated by answering ten questions at the end of each story; includes reading for main idea, details and inferences.

The programmed sound filmstrip machine was used for:

1. The machine uses a cassette tape, a filmstrip, and worksheets and/or workbook to use the visual, auditory, and kinesthetec modes of learning. The machine also has three buttons

below the screen so that a choice may be made from three possibilities. An incorrect choice causes nothing to happen; a correct choice causes the next frame to appear and the tape to continue.

2. This machine may be used for these programs:
   a. Mathematics - basics, measurements, algebra, geometry, word problems.
   b. Spelling.

The cassette tape recorder is used for: vocabulary development, motivation, comprehension, math, english - parts of speech, writing, punctuation, following directions, and specific vocational area information.

The idea of individualized and programmed teaching is to teach - test - and get immediate feedback. The teaching is in "small steps", having very little room for error, and generating feelings of success. Students may be working on a variety of tasks or activities, without feelings of intimidation, allowing the Individualized Manpower Training System specialists to be "learning managers".

IV

RESULTS

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IV Results

The writer evaluated the Practicum. The instruments used were daily observations and group and individual tests on daily activities performed.

The students were given comprehension tests over a period of nine weeks to see if they could raise their reading comprehension levels. A pre-test was given at the beginning of the Practicum to determine the year and month level of reading comprehension, language arts, and mathematics. The students read material daily, and used teaching machines and other training devices in the Individualized Manpower Training System laboratory to support their learning effort. The students were tested on their reading and reading comprehension weekly and/or daily as necessary to make midcourse corrections in their programs. The scores in their vocational education classes were also compared, over the nine week period, to those of nonparticipating IMTS students.

Of the thirty-seven students in the test group, thirty-five showed marked improvement and average gains of: (1) Reading +1.35 years

(2) Language arts + 11 months

(3) Mathematics + 1.4 years.

Two students showed gains of three (3) years or more,

eleven showed gains in excess of two (2) years.

Compared to their nonparticipating classmates; 335 ninth and tenth grade vocational education students, thirty-four (34) passed and three (3) failed in their vocational disciplines. These three students failed due to a lack of attendance not because of academics, as contrasted to twenty-two who failed academically.

Having thirty-five of the thirty-seven students raise their reading comprehension skills 10 percent, and thirty-four pass their vocational education classes, demonstrated overall success. Most of the test group stated, that they prefered to have been in a regular language arts class with their friends. However, they also felt that they may not have successfully completed or have passed in a regular academic level class prior to participating in the Individualized Manpower Training System program.

The writer has discovered that if students on the skills level are taught reading skills through the Individualized Manpower Training System laboratory, reading scores will increase.

Activities within the Practicum were geared to the individual, with prescriptive goals, and challanges

to these students. These activities are not used in the general or skills-leveled classes due to the materials and facilities required, as well as the high student to teacher ratios. Once skills were mastered the students did feel a confidence they had failed to show at the beginning of the year. If students feel confident with themselves, they tend to relax with the class (academic) activities. Herein lies a basis for futhering education.

A manual or handbook was not a product of the Practicum. The writer feels that attempted solutions of the problem, raising comprehension scores through the use of the Individualized Manpower Training System (IMTS) laboratory, has taken place. There is much information available on strategies in this area to assist anyone who is interested in solving the problem. The reading specialists and the county's reading supervisor know that the problem exists on a local, state and even national level. The computer search indicated that other schools are attempting to raise comprehension scores, as well as all reading scores, at all grade levels, for all students, not just vocational education students. Several school systems in other states have lists of programs which help students to develop their reading skills and strengthen their comprehension level. The write does not know how successful other schools are at solving the problem.

The write does feel that the Vocational teachers can help the students to develop their skills in reading and reading comprehension through a concerted effort for early problem area identification and guidance into the Individualized Manpower Training System

(IMTS) laboratory.

V Recommendation

The writer has plans to make the strategy ongoing for the fall school term. This method can be extended into either a one or two semester plan, to raise the reading comprehension scores of these tenth grade students before the Stanford Achievement Test is taken, thus helping these students in their vocational education classes as well as to be placed into an average language arts class.

The writer will give duplicate copies of the Practicum to the guidance department, the assistant principal for vocational education, the IMTS staff, the other vocational department chairperson, and a copy to the English department chairperson. An additional copy will also be placed in the schools' media center. By placing a copy in the teachers' reference library of the media center, the other departments at this school will have access to another approach to remediating reading and reading comprehension of skills-leveled students. The writer also feels that the facilities of the Individualized Manpower Training System lab may be utilized on a space available basis by average leveled students and the faculty alike to further raise their reading and reading comprehension scores.

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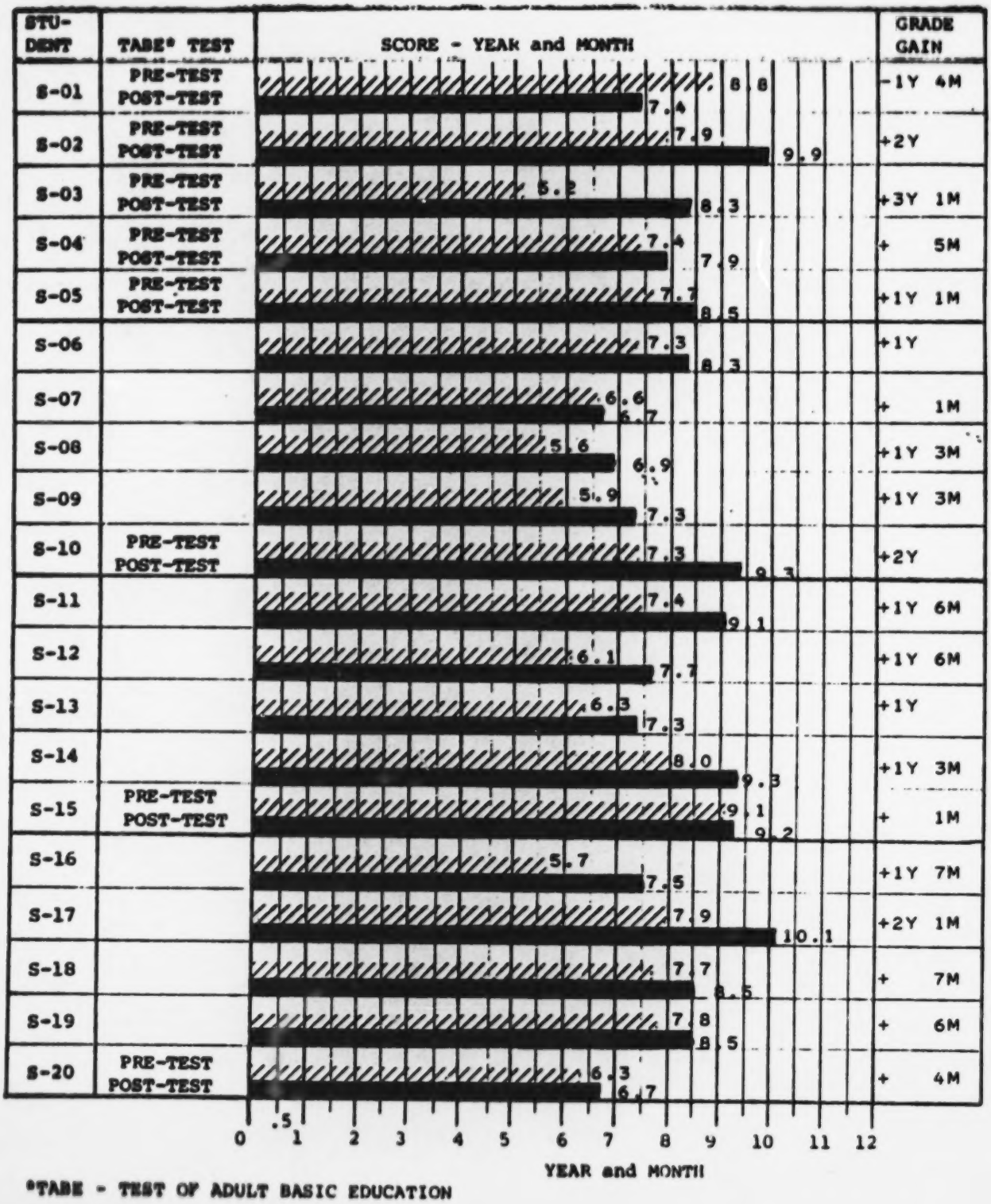
INDIVIDUALIZED MANPOWER TRAINING SYSTEM

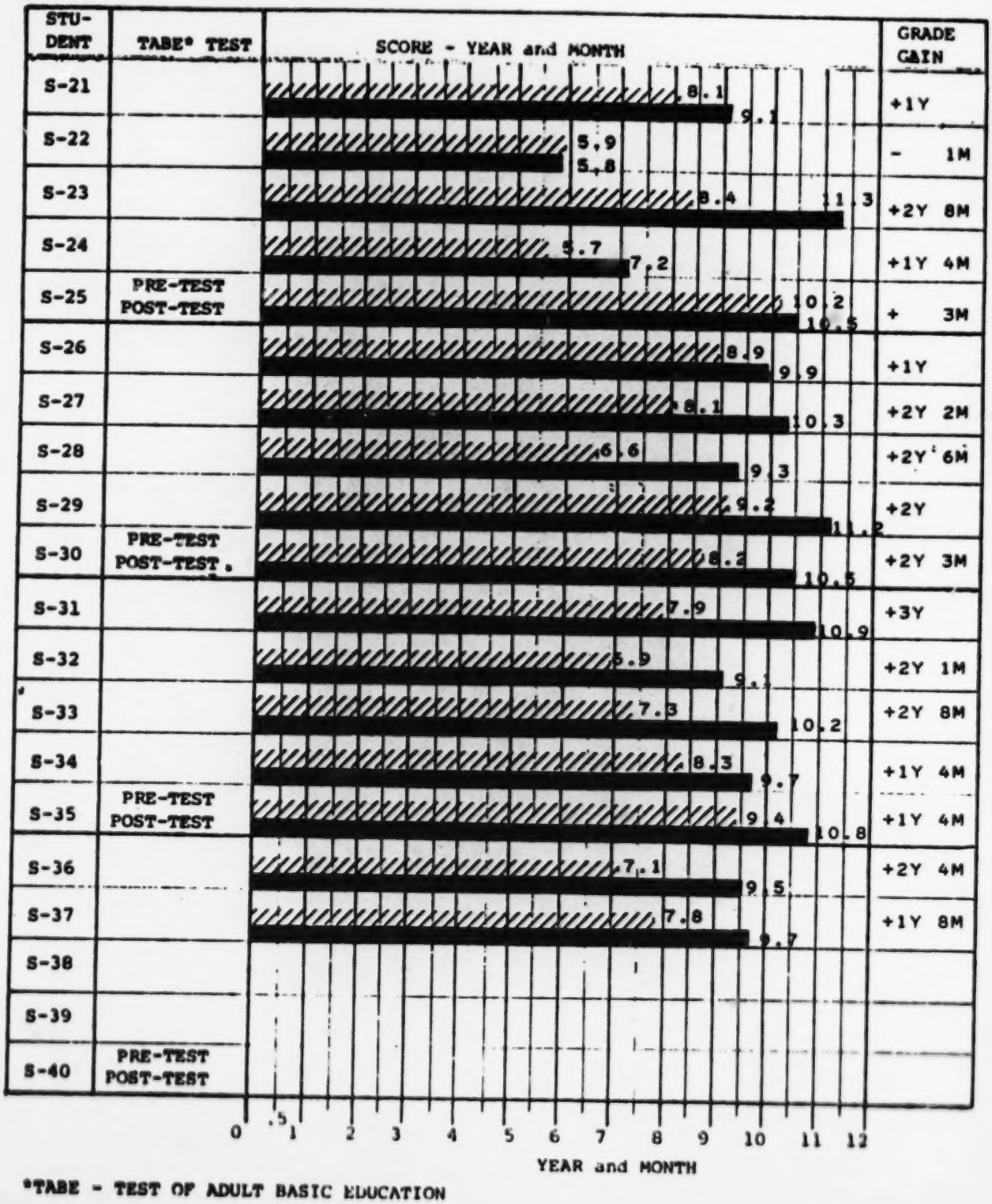
IMTS GRADE GAINS: TENTH GRADE 1983-1948 SUBJECT: READING +1 YR 3.5 MO


STU-DENT
TABE* TEST
SCORE - YEAR and MONTH
GRADE GAIN
S-01 PRE-TEST 8.8 POST-TEST 7.4 -1Y 4M
S-02 PRE-TEST 7.9 POST-TEST 9.9 +2Y
S-03 PRE-TEST 5.2 POST-TEST 8.3 +3Y 1M
S-04 PRE-TEST 7.4 POST-TEST 7.9 + 5M
S-05 PRE-TEST 7.7 POST-TEST 8.5 +1Y 1M
S-06 7.3 8.3 +1Y
S-07 6.6 6.7 + 1M
S-08 5.6 6.9 +1Y 3M
S-09 5.9 7.3 +1Y 3M
S-10 PRE-TEST 7.3 POST-TEST 9.3 +2Y
S-11 7.4 9.1 +1Y 6M
S-12 6.1 7.7 +1Y 6M
S-13 6.3 7.3 +1Y
S-14 8.0 9.3 +1Y 3M
S-15 PRE-TEST 9.1 POST-TEST 9.2 + 1M
S-16 5.7 7.5 +1Y 7M
S-17 7.9 10.1 +2Y 1M
S-18 7.7 8.5 + 7M
S-19 7.8 8.5 + 6M
S-20 PRE-TEST 6.3 POST-TEST 6.7 + 4M
0 .5 1 2 3 4 5 6 7 8 9 10 11 12
YEAR and MONTH

*TABE - TEST OF ADULT BASIC EDUCATION

INDIVIDUALIZED MANPOWER TRAINING SYSTEM

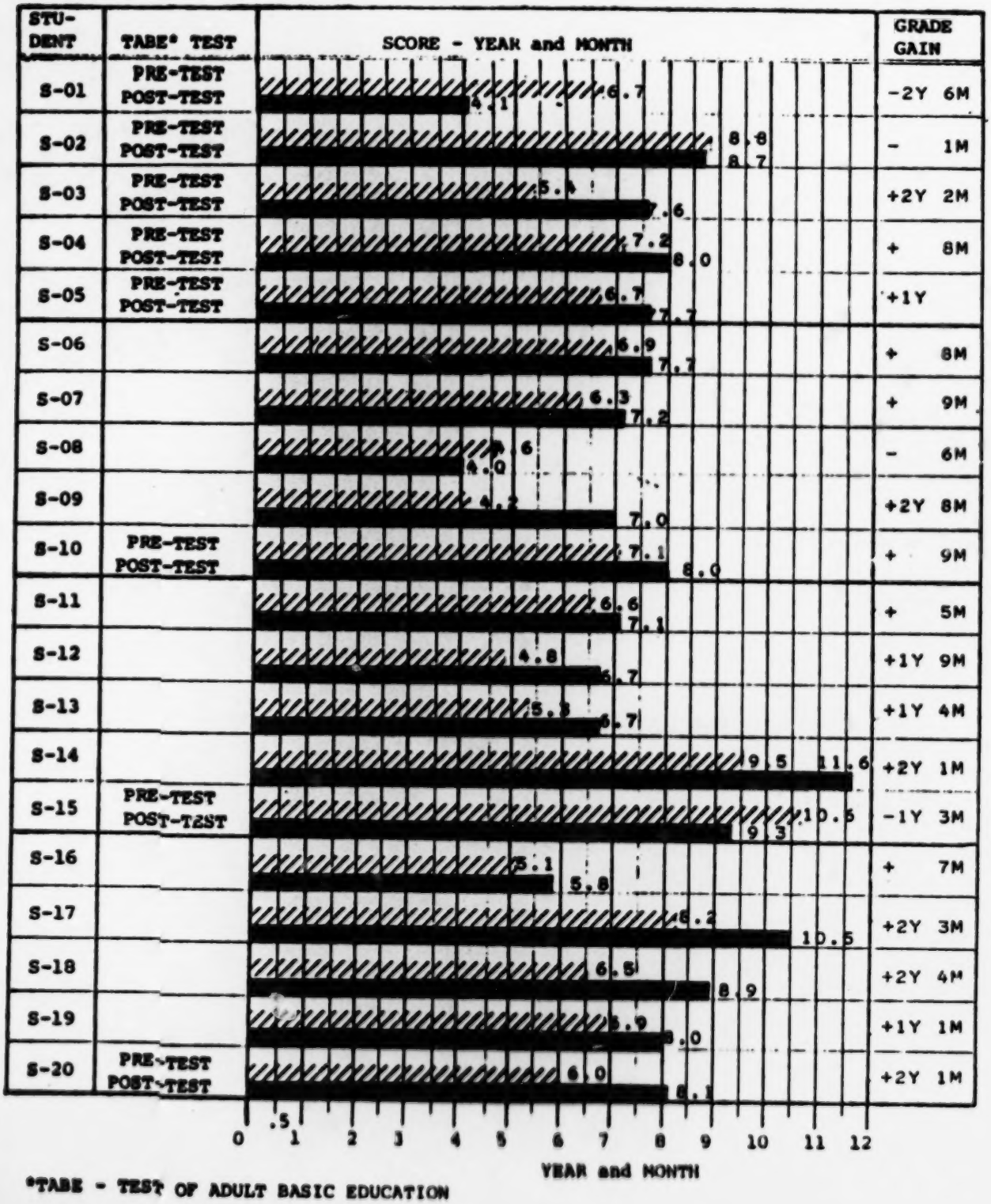
IMTS GRADE GAINS: TENTH GRADE 1983-1984 SUBJECT: READING



*TABE - TEST OF ADULT BASIC EDUCATION

INDIVIDUALIZED MANPOWER TRAINING SYSTEM

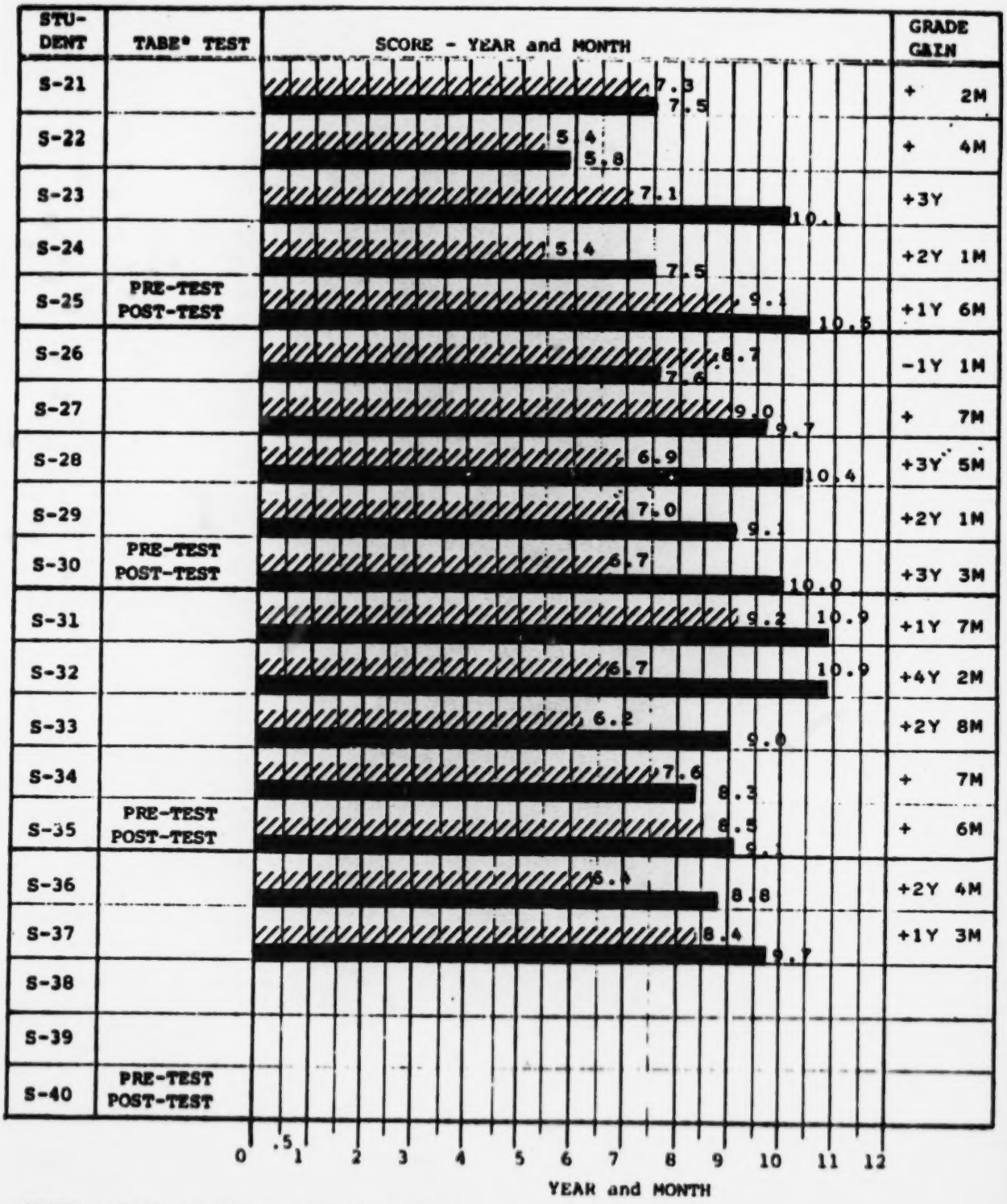
IMTS GRADE GAINS: TENTH GRADE 1983-1948 SUBJECT: LANGUAGE ARTS +11 MO


STU-DENT
TABE* TEST
SCORE - YEAR and MONTH
GRADE GAIN
S-01 PRE-TEST POST-TEST 4.1 6.7 -2Y 6M
S-02 PRE-TEST POST-TEST 8.8 8.7 - 1M
S-03 PRE-TEST POST-TEST 5.8 7.6 +2Y 2M
S-04 PRE-TEST POST-TEST 7.2 8.0 + 8M
S-05 PRE-TEST POST-TEST 6.7 7.7 +1Y
S-06 6.9 7.7 + 8M
S-07 6.3 7.2 + 9M
S-08 4.6 4.0 - 6M
S-09 4.2 7.0 +2Y 8M
S-10 PRE-TEST POST-TEST 7.1 8.0 + 9M
S-11 6.6 7.1 + 5M
S-12 4.8 6.7 +1Y 9M
S-13 5.8 6.7 +1Y 4M
S-14 9.5 11.6 +2Y 1M
S-15 PRE-TEST POST-TEST 9.3 10.6 -1Y 3M
S-16 5.1 5.8 + 7M
S-17 8.2 10.5 +2Y 3M
S-18 6.8 8.9 +2Y 4M
S-19 5.9 8.0 +1Y 1M
S-20 PRE-TEST POST-TEST 6.0 8.1 +2Y 1M
0 .5 1 2 3 4 5 6 7 8 9 10 11 12
YEAR and MONTH

*TABE - TEST OF ADULT BASIC EDUCATION

INDIVIDUALIZED MANPOWER TRAINING SYSTEM

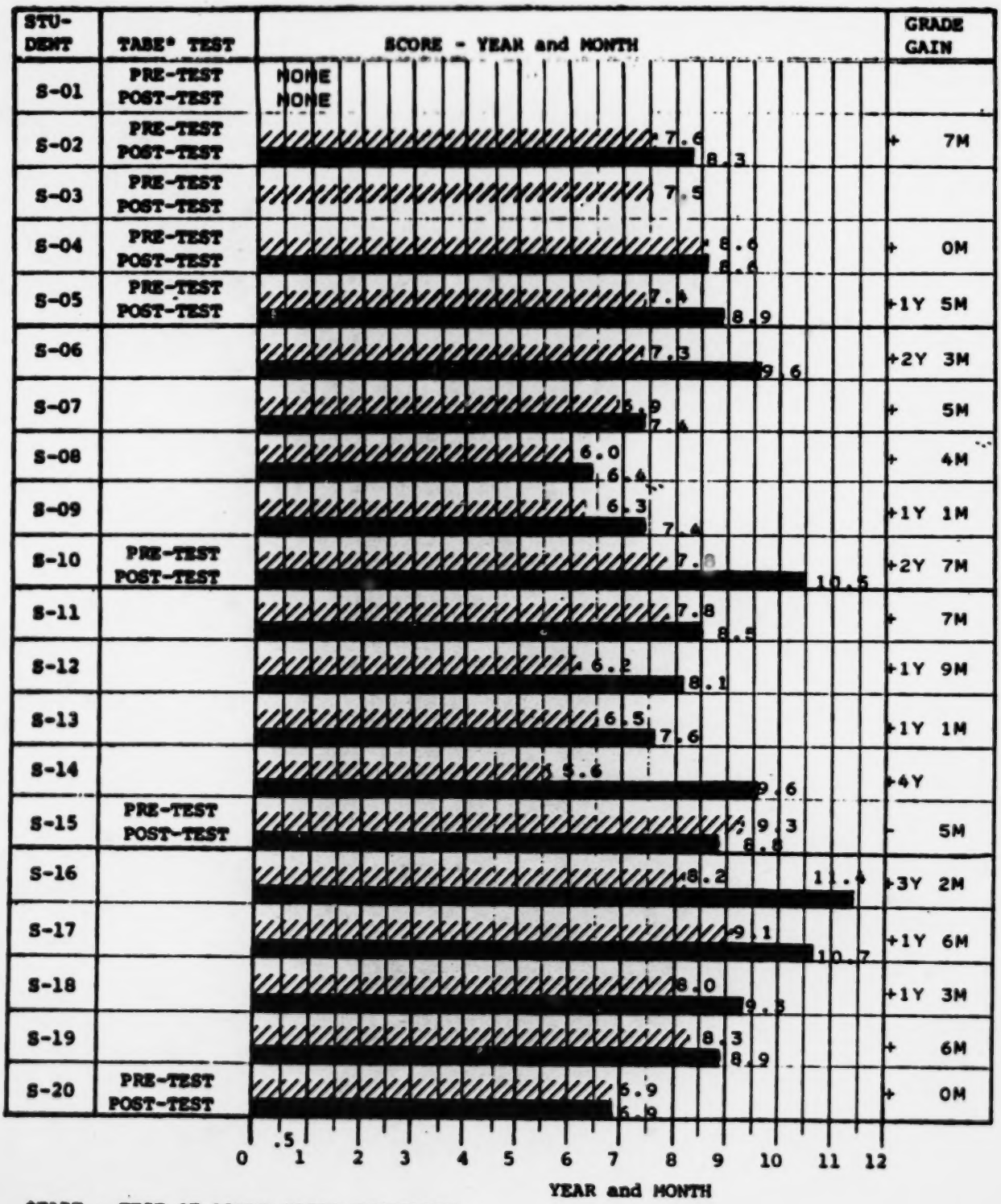
INTS GRADE GAINS: TENTH GRADE 1983-1984 SUBJECT: LANGUAGE ARTS



*TABE - TEST OF ADULT BASIC EDUCATION

INDIVIDUALIZED MANPOWER TRAINING SYSTEM

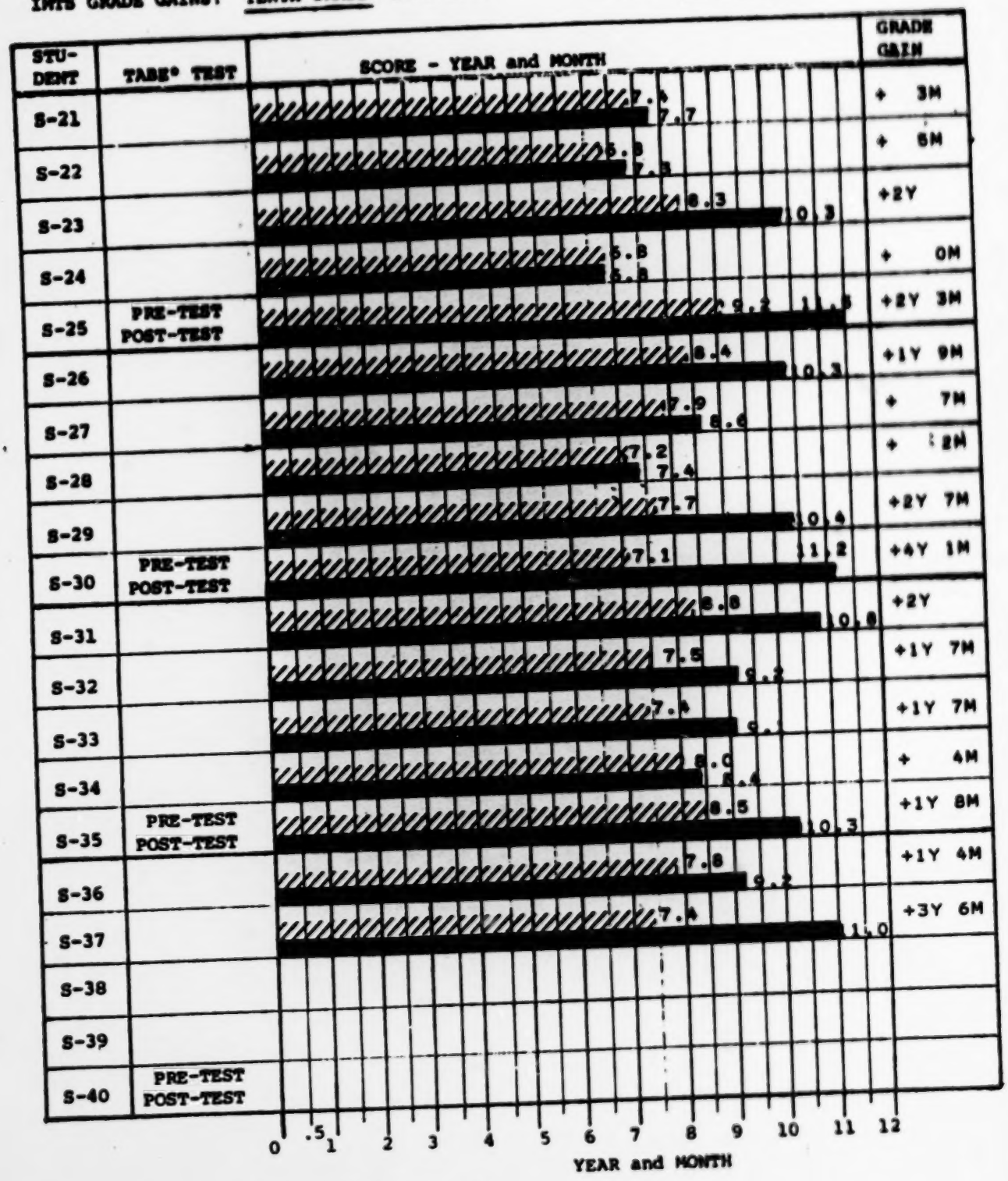
INTS GRADE GAINS: TENTH GRADE 1983-1948 SUBJECT: MATHEMATICS +1YR 4MO


STU-DENT
TABE* TEST
SCORE - YEAR and MONTH
GRADE GAIN
S-01 PRE-TEST NONE POST-TEST NONE
S-02 PRE-TEST 7.6 POST-TEST 8.3 + 7M
S-03 PRE-TEST 7.5 POST-TEST
S-04 PRE-TEST 8.6 POST-TEST 8.6 + 0M
S-05 PRE-TEST 7.4 POST-TEST 8.9 +1Y 5M
S-06 7.3 9.6 +2Y 3M
S-07 7.4 + 5M
S-08 6.0 6.4 + 4M
S-09 6.3 7.4 +1Y 1M
S-10 PRE-TEST 7.0 POST-TEST 10.5 +2Y 7M
S-11 7.8 8.5 + 7M
S-12 6.2 8.1 +1Y 9M
S-13 6.5 7.6 +1Y 1M
S-14 5.6 9.6 +4Y
S-15 PRE-TEST 9.3 POST-TEST 8.8 - 5M
S-16 8.2 11.4 +3Y 2M
S-17 9.1 10.7 +1Y 6M
S-18 8.0 9.3 +1Y 3M
S-19 8.3 8.9 + 6M
S-20 PRE-TEST 5.9 POST-TEST 5.9 + 0M
.5 0 1 2 3 4 5 6 7 8 9 10 11 12
YEAR and MONTH

*TABE - TEST OF ADULT BASIC EDUCATION

INDIVIDUALIZED MANPOWER TRAINING SYSTEM

IMTS GRADE GAINS: TENTH GRADE 1983-1984 SUBJECT: MATHEMATICS



*TABE - TEST OF ADULT BASIC EDUCATION